

## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A rotary electric machine comprising:  
 a frame;  
 a stator whose stator-slot number  $N_s$  is 12;  
 a rotor whose rotor-pole number  $N_p$  is 8, ~~said the~~ rotor and being disposed ~~in a space~~ inside ~~said the~~ stator; ~~and wherein,~~  
given that said the frame has a frame thickness  $T(\theta)$  at mechanical angle  $\theta$ , with respect to a reference line that connects ~~the~~ inner circumferential center of the frame with an arbitrary point, other than the center, and the frame thickness around the center is circularly expanded in ~~the~~ Fourier series as expressed by equation (1),

$$T(\theta) = \sum_{n=0}^{\infty} T_n \cos(n\theta + \phi_n) \quad (1)$$

(~~wherein~~ where  $n$  is 0, 1, 2, 3, . . . ,  $T_n$  is the magnitude of the  $n$ -th component of the frame thickness when  $T(\theta)$  is expanded in the Fourier series as in equation (1), and  $\phi_n$  is ~~the~~ phase),

~~and that~~ the difference between the stator-slot number  $N_s$  and the rotor-pole number  $N_p$  is  $k$  ( $= |N_s - N_p|$ ), and

stress-relieving spaces provided are located in portions of ~~said the~~ frame in an arrangement that does not have 90-degree mechanical angle rotational symmetry, in such a way that the sum  $P$  of inclusion ratios for the  $k$ -th component  $T_k$  and the  $N_p$ -th component  $T_{N_p}$  ~~that, which~~ are the Fourier series expansion coefficients for the frame thickness  $T(\theta)$  expressed by equation (2)

$$P = (T_k + T_{N_p}) / \sum_{n=0}^{\infty} T_n \times 100 [\%] \quad (2)$$

~~falls under~~, is less than 12%.

2. (Currently Amended) ~~A~~The rotary electric machine as recited in claim 1, wherein effective frame thickness is replaced with  $2T_0$  when the frame thickness  $T(\theta)$  is not smaller than  $2T_0$ , and then the effective frame thickness, instead of ~~said the~~ frame thickness, is circularly expanded in the Fourier series, where  $T_0$  is the average frame thickness.

3. (Currently Amended) ~~A~~The rotary electric machine as recited in claim 1, wherein ~~said the~~ stress-relieving spaces are at least either stress-relieving grooves provided located on

the outer and inner circumferences of the frame, or stress-relieving holes ~~provided~~located in the frame.

4. (Currently Amended) ~~A~~The rotary electric machine as recited in claim 1, wherein at least a portion of the cross-section of ~~said~~the stress-relieving spaces in a plane orthogonal to the center axis of the frame inner circumference is shaped in a curved line.

5. (Currently Amended) ~~A~~The rotary electric machine as recited in claim 1, wherein ~~said~~the stress-relieving spaces mixedly include holes that are drilled through the frame member and holes not drilled therethrough.

6. (Currently Amended) ~~A~~The rotary electric machine as recited in claim 1, wherein, the contour of ~~said~~the frame in a cross-sectional plane orthogonal to the center axis of the frame inner circumference is approximately square.